INFORMATION SHEET

ORDER NO.
GUENOC WINERY, INC.
GUENOC WINERY
LAKE COUNTY

Guenoc Winery, Inc. (Discharger) owns and operates the Guenoc Winery which is approximately two miles southeast of Middletown on Butts Canyon Road in Lake County. Activities at the winery facility include receiving, crushing and pressing of grapes; fermentation; processing into finished white and red wines; and distribution. The winery produces approximately 140,000 cases per year for export and local sale.

The previous Waste Discharge Requirements (WDRs) are not adequate because the Discharger submitted a Report of Waste Discharge (RWD) as required by Provision No. G.3.h. The RWD was to either (a) contain a design for a pond liner system and land treatment unit that complies with Title 27 and a timeline that shows compliance or (b) contain a technical report demonstrating what has been and will be done to modify the waste stream so that background water quality will be maintained or limited to degradation consistent with State Board Resolution No. 68-16. In addition, the Discharger has continued to impact groundwater with salt constituents and has not submitted an adequate Engineering Feasibility Study (EFS) and Corrective Action Plan (CAP) as required by Provision Nos. G.3.j.a and G.3.j.b of the WDRs. The EFS is to assess the feasibility and effectiveness of various remedial options to return salt impacted groundwater to background levels as measured in the background monitoring well. The CAP is to propose the best remedy selected from the EFS to return salt impacted groundwater to background levels. The Discharger now proposes to modify the treatment and disposal method, as described below, but has not yet addressed groundwater remediation.

Domestic water used for winemaking processes (including sanitation, grape crushing, barrel and equipment rinsing, filtering, and bottling) is obtained from an onsite well. The well water is first ozonated before being pumped to the winery. Surface water from nearby Lake Bordeaux is used for the ammonia condensers for fermentation purposes. A portion of this water that is softened is pumped through a multimedia sand and carbon filter. The backwash water from this filtering system will be temporarily stored and then hauled offsite by a licensed hauler. This Order requires that the backwash water be placed into an aboveground tank or equivalent prior to disposal.

The Discharger estimates a maximum daily process wastewater flow rate of approximately 16,500 gallons per day (gpd) during the peak grape processing period (crush). This Order allows for an approximate monthly average flow of 6,800 gpd with higher monthly flows allowed during the crush season (typically August through October), as long as the total yearly flow does not exceed 2,380,000 gallons.

Wastewater generated from winery processing activities (process/equipment cleaning, washdown operations, and evaporative cooling towers) is collected in a series of trench floor drains both at the crush pad and inside the winery building. The wastewater then flows via gravity from the winery facility to a 600-gallon concrete vault. From the vault, the wastewater will be pumped to a rotary screen and then to a Bioreactor where the wastewater will receive biological treatment. The Bioreactor will consist of aeration tanks designed to treat a flow of approximately 16,500 gallons per day (gpd) with a BOD concentration of 9,000 mg/L to a discharge concentration of 200 mg/L. A clarifier attached to the final aeration tank will be used to settle out the waste activated sludge. From the tank, the wastewater will be discharged to a lined storage pond. The Discharger proposes to abandon in place the existing five unlined ponds and construct a wastewater pond that will meet Title 27 requirements. The wastewater in the pond will be

blended with clean surface water from Lake Bordeaux in a mixing box prior to being applied to 54 acres of pastureland (Dedicated Disposal Area 2; DDA-2). The volume of wastewater produced by the winery is insufficient to irrigate the entire pasture area, and therefore a substantial volume of clean water will be mixed with the wastewater. Tailwater will be prevented from leaving this area by berms constructed around the designated disposal area.

The quarterly groundwater monitoring results show that the discharge of waste to the five unlined ponds and to DDA-1 has polluted the underlying groundwater with salt constituents. DDA-1 consists of seven acres of pastureland that has historically been used as the wastewater disposal area. This Order states that wastewater may no longer be applied to DDA-1 after 1 September 2006. Even with the improved treatment from the Bioreactor, the discharge to the pond must still be classified as a discharge of designated waste because the TDS of the effluent entering the lined pond will be 900 mg/L while the background groundwater TDS concentration is 383 mg/L. Groundwater is very shallow and at times it rises to within the five unlined ponds; therefore, the discharge of the effluent into the unlined ponds must be considered a direct discharge to groundwater. However, because the unlined ponds will be abandoned and a lined pond will be constructed per Title 27 requirements, the hydraulic connection between the effluent and groundwater will no longer occur. Due to dilution with surface water from Lake Bordeaux, the discharge to DDA-2 is not classified as designated waste. Because the Discharger cannot immediately comply with the effluent and groundwater limitations of this Order, staff have prepared a companion Cease and Desist (C&D) Order.

The C&D Order requires the Discharger to submit a Report of Waste Discharge (RWD) containing a design for a lined pond that meets the performance and prescriptive standards of Title 27. This pond must be constructed and operational by 1 July 2007. In addition, the C&D Order requires the Discharger to install and operate the Bioreactor by 1 October 2006, and to submit a report certifying that the treatment system has been built as described in the WDRs. The WDRs require the Discharger to install additional groundwater monitoring wells within and around DDA-2, and to determine final background groundwater quality by 1 March 2007. In addition, the WDRs require the Discharger to prepare and submit an Operations and Maintenance Plan. The WDRs also requires an extensive monitoring and reporting program, which includes the process wastewater, ponds, designated disposal area, solids, and groundwater.

Surface water drainage is to Bucksnort Creek, which is a tributary to Putah Creek, which is tributary to Lake Berryessa.

GJC/WSW: 20-Apr-06